Creating Safari Web Applications in Dashcode

Session 208

These are confidential sessions—please refrain from streaming, blogging, or taking pictures.

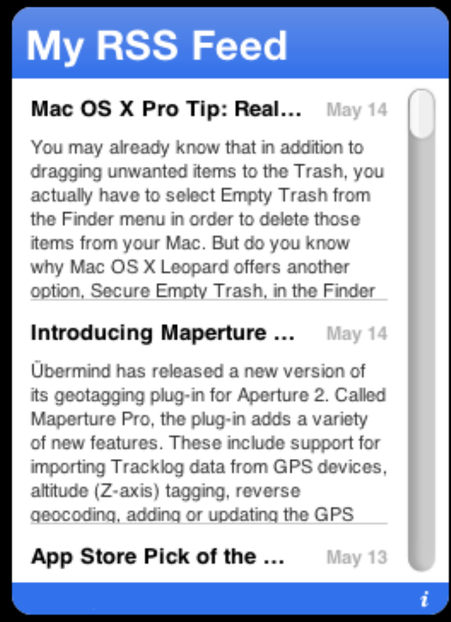
Creating Safari Web Applications in Dashcode

Sarah Laiwala
Dashcode Engineer

Dashcode 1.0

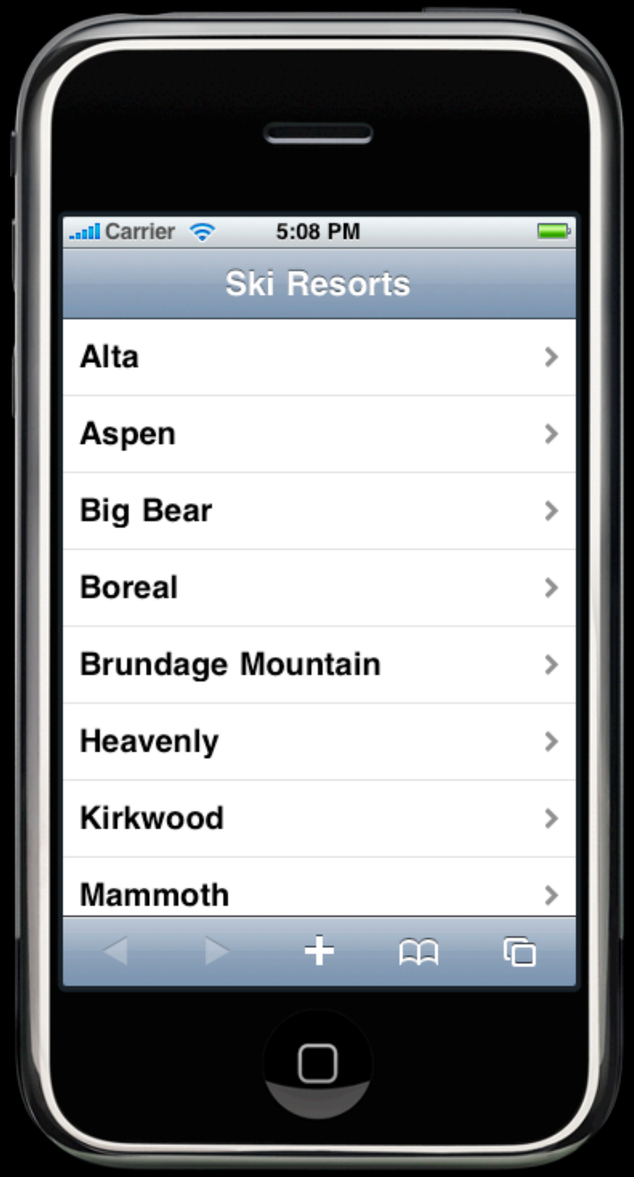
PROCESSOR
DISK ACTIVITY
IN
OUT
NETWORK

321 : 10 : 40 : 27
DAYS HOURS MIN SEC
Event Label


My RSS Feed
Mac OS X Pro Tip: Real... May 14
You may already know that in addition to dragging unwanted items to the Trash, you actually have to select Empty Trash from the Finder menu in order to delete those items from your Mac. But do you know why Mac OS X Leopard offers another option, Secure Empty Trash, in the Finder
Introducing Maperture ... May 14
Übermind has released a new version of its geotagging plug-in for Aperture 2. Called Maperture Pro, the plug-in adds a variety of new features. These include support for importing Tracklog data from GPS devices, altitude (Z-axis) tagging, reverse geocoding, adding or updating the GPS
App Store Pick of the ... May 13

Travel Guide: Kauai, Hawaii
Wailua Falls
Very accessible, yet impressive falls.
Photo by Andy Huang
Kaulakahi Channel
Kekaha
Hanapepe
Map data ©2008 NAVTEQ™ - Terms of Use
Map
Satellite
Hybrid

Dashcode 2.0

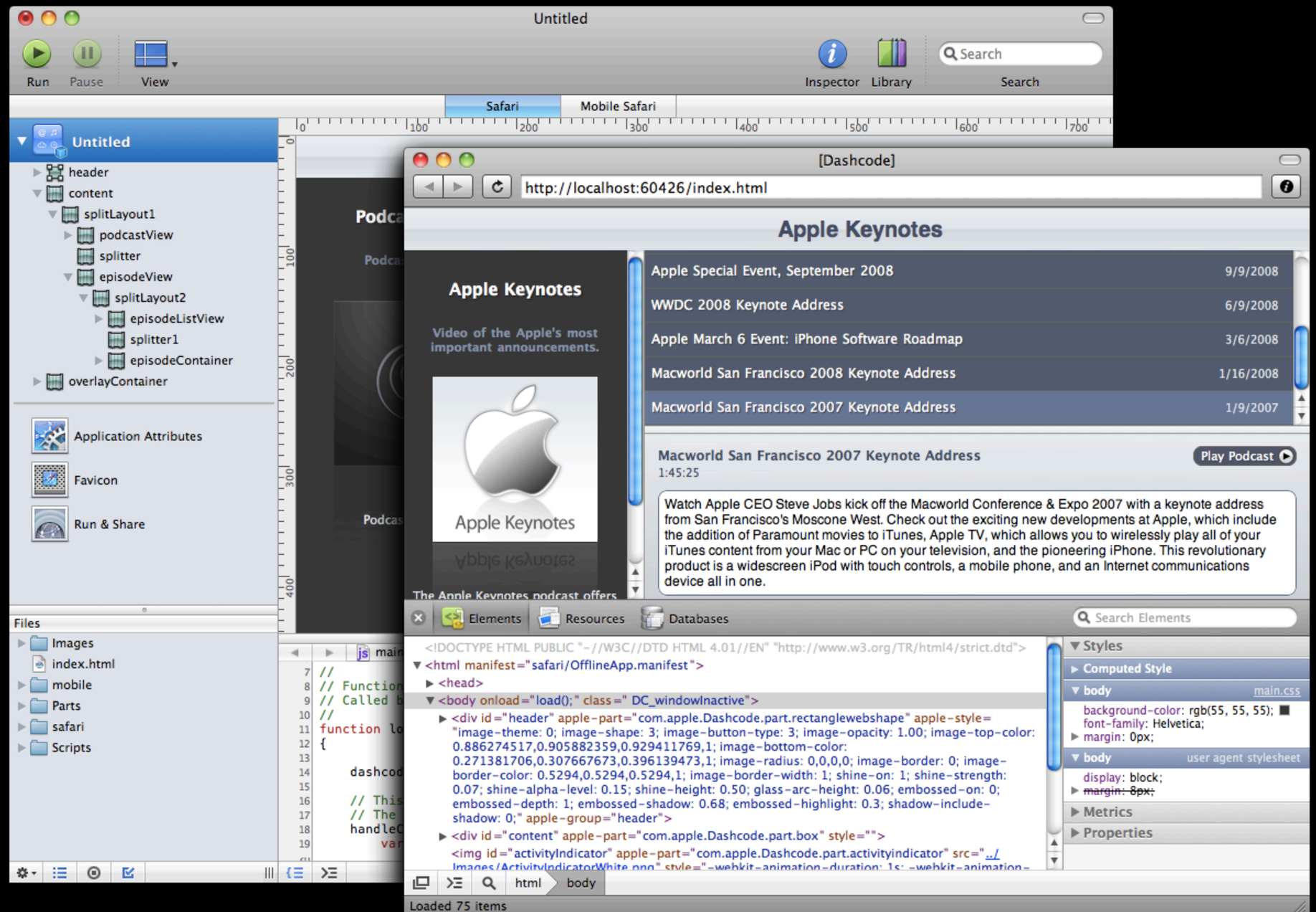

Carrier
5:08 PM
Ski Resorts
Alta
Aspen
Big Bear
Boreal
Brundage Mountain
Heavenly
Kirkwood
Mammoth

Dashcode 3.0

index.html
localhost:55323/
Google
Science Frid... Podcast (1)
Apple
Yahoo!
Google Maps
YouTube
Wikipedia
News (453)
Popular
Coming Attractions: Tetro
Multiple Academy Award–winning filmmaker Francis ...
The Internet turns 40
You're so used to paying bills, getting your news and w...
Announcing the new iPhone 3G S —The Fastest, Most Powerful iPhone Yet
Apple today introduced the new iPhone 3G S, featuring ...
MacBook Pro updated with new models and innovative built-in battery
Today Apple updated the aluminum unibody MacBook ...
Apple Unveils Mac OS X Snow Leopard and Mac OS X Server Snow Leopard
Apple today unveiled Mac OS X Snow Leopard, an even...
Apple Releases Safari 4
Today Apple released Safari 4, the world's fastest and ...
Blue Man Group in sync with iPhone
Hear "Blue Man Group," and you may think of three, hi...
App Store Pick of the Week: TypeDrawing
TypeDrawing, a unique drawing application, offers a n...
Announcing the new iPhone 3G S —The Fastest, Most Powerful iPhone Yet
Published on Monday, June 8, 2009
Apple today introduced the new iPhone 3G S, featuring improved speed and performance—up to twice as fast as iPhone 3G—longer battery life, a high-quality 3 megapixel autofocus camera, easy to use video recording and hands free voice control. iPhone 3G S includes the new iPhone OS 3.0, with over 100 new features such as Cut, Copy and Paste, MMS, Spotlight Search, landscape keyboard and a new Find My iPhone feature that works together with MobileMe to help you locate a lost iPhone.
Read More
Loaded 73 items

What’s New in Dashcode 3.0

Safari Web Applications



Web Standards

HTML 5

Application Cache

HTML 5

Video

```
<video src=”GetAMac.mp4”>
```

HTML 5

Video

```
<video src=”GetAMac.mp4”>
```

CSS 3

Reflections

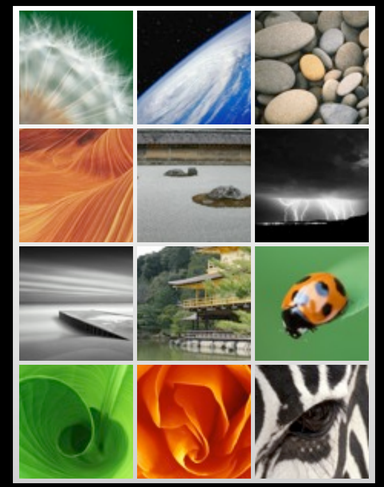
Transitions

Animations

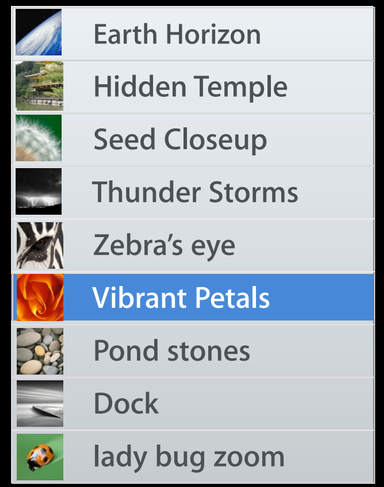
Transforms

New UI Parts

Split Layout



Grid



List

Bindings

```
<?xml version="1.0" encoding="utf-8"?>
<records date="Wed, 13 May 2009 00:50:03 -0700">
  <movieinfo id="3143">
    <info>
      <title>$9.99</title>
      <runtime>2:09</runtime>
      <rating>Not yet rated</rating>
      <studio>Regent Releasing</studio>
      <postdate>2009-05-07</postdate>
      <releasedate>2009-06-19</releasedate>
    </info>
    <cast>
       <name>Geoffrey Rush</name>
       <name>Anthony LaPaglia</name>
       <name>Samuel Johnson</name>
       <name>Claudia Karvan</name>
       <name>Joel Edgerton</name>
    </cast>
  </movieinfo>
</records>
```

Demo

A brief tour

New in Dashcode 3.0

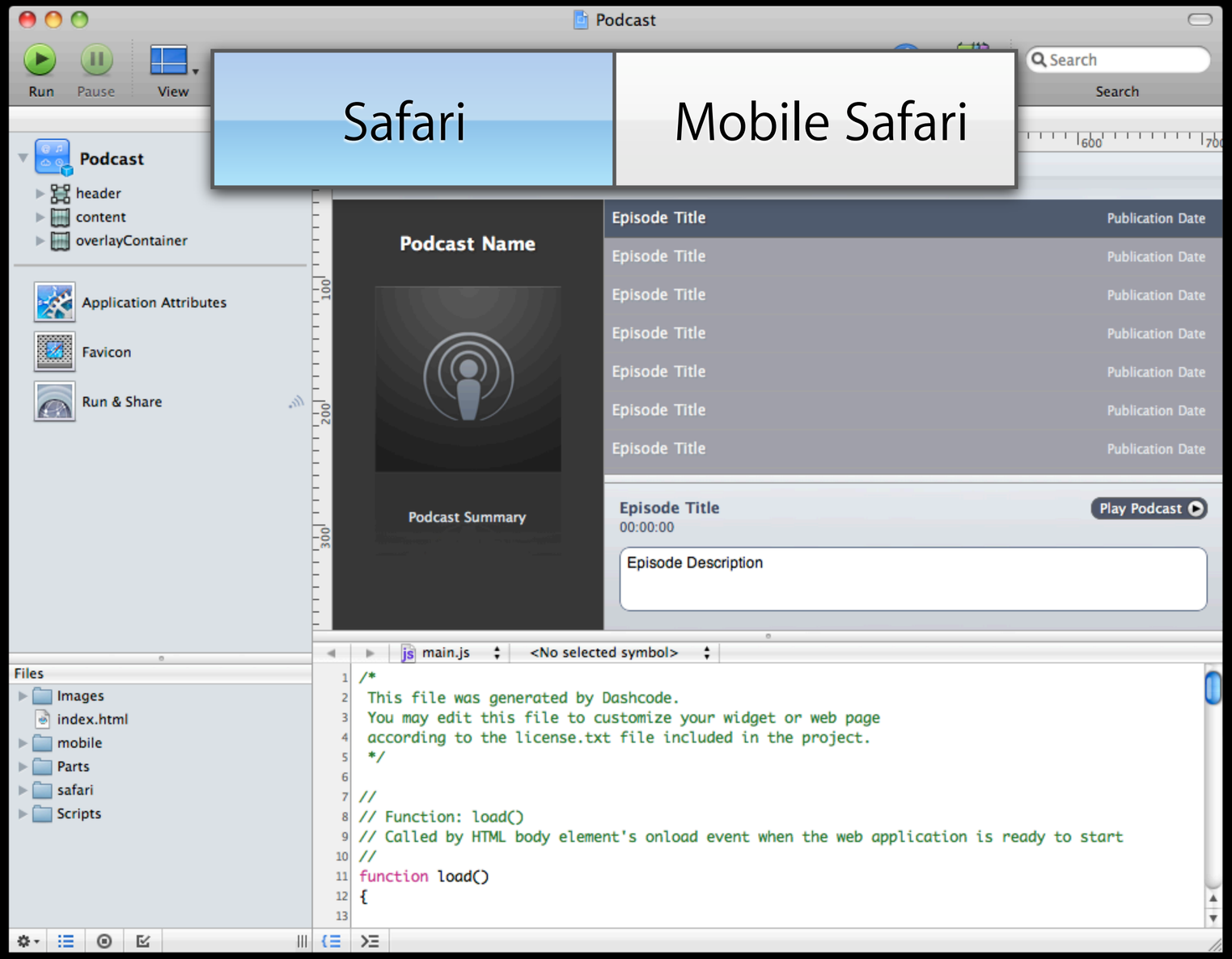
- Safari web applications
- Cool new templates
- New UI parts
- HTML5 and CSS3 support
- Bindings

Dashcode Web Application Basics

Daniel Gobera
El Ingeniero

Safari and iPhone Version

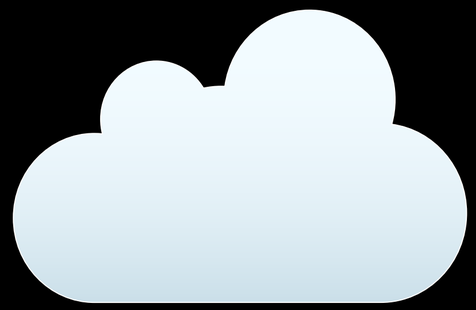
One Project, Two Products



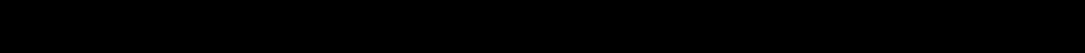
One Project, Two Products

Working with Remote Data

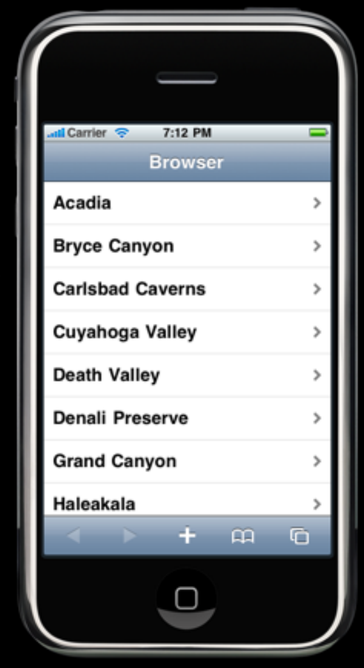
Remote Data



HTML, CSS, Javascript



XML, JSON



Fetching Data with Ajax

XMLHttpRequest

```
fetchDrinks: function ()
{
  var xhr = new XMLHttpRequest();

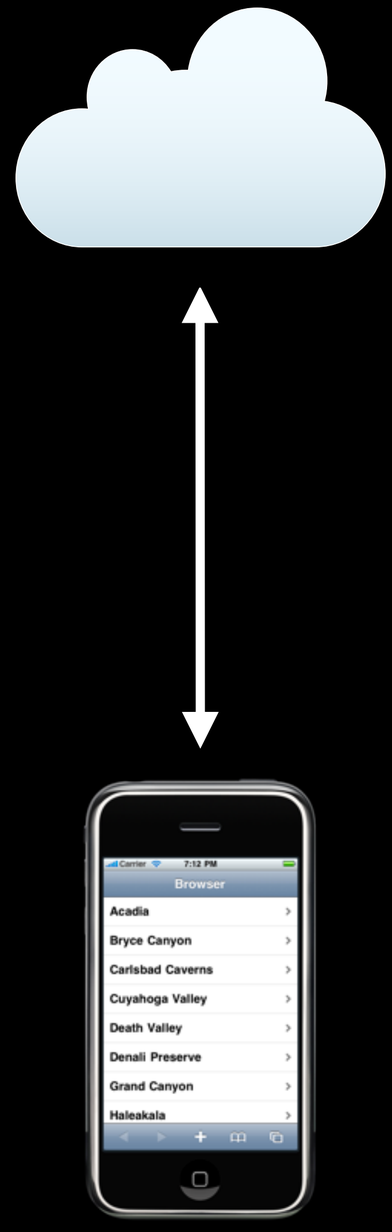
  xhr.open("GET", this._getQueryURL());
  xhr.setRequestHeader("Cache-Control", "no-cache");

  xhr.onload = function () {
    this._receiveData(xhr);
  };

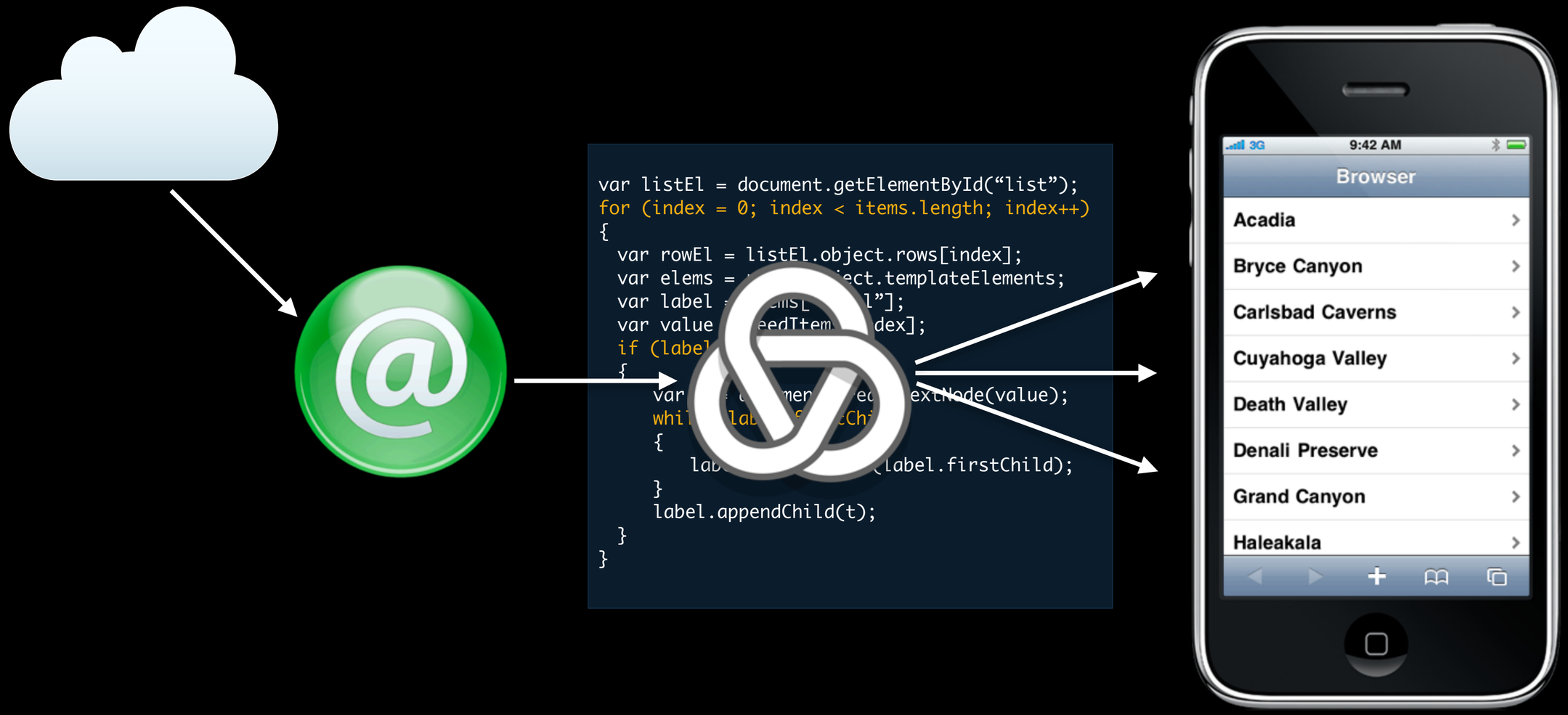
  xhr.send();
  this._lastXHR = xhr;
}
```

Data Sources

- Encapsulate Ajax requests
- Parse JSON, XML, RSS
- Visualize data



Data Sources + Bindings

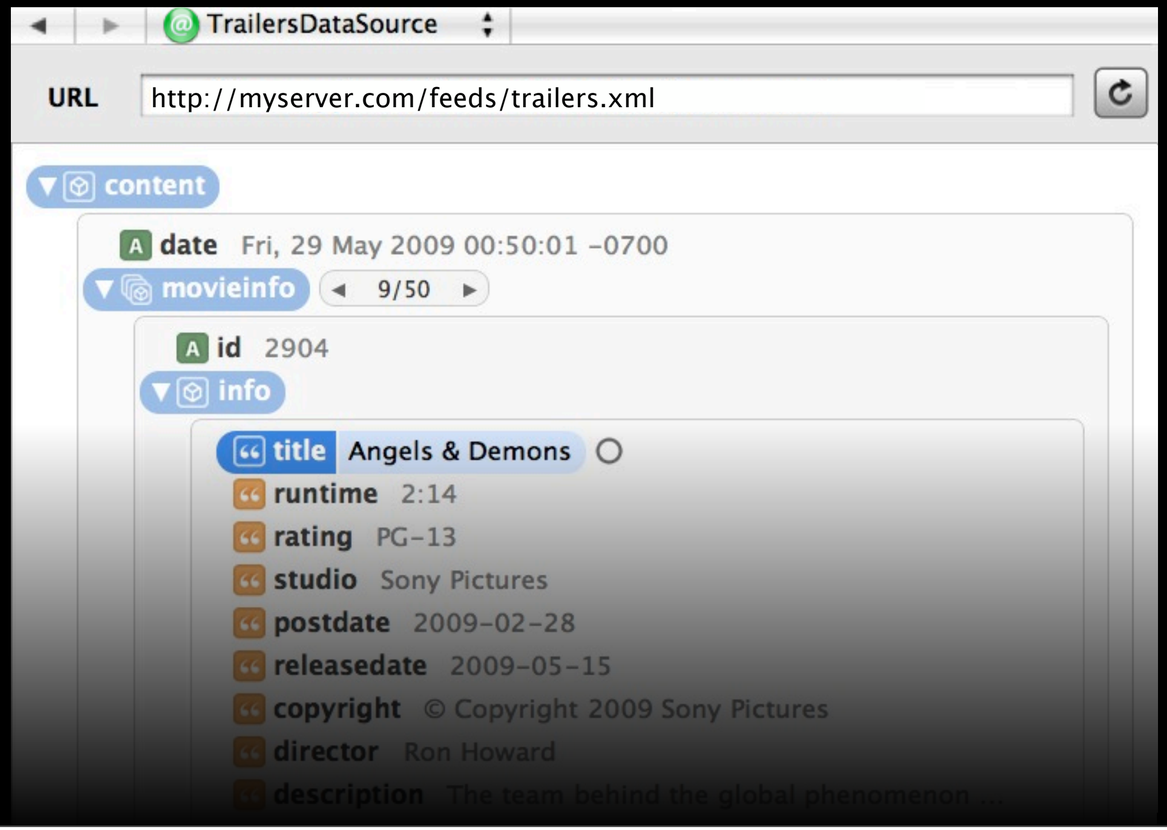


Demo

Codeless Trailers

Summary

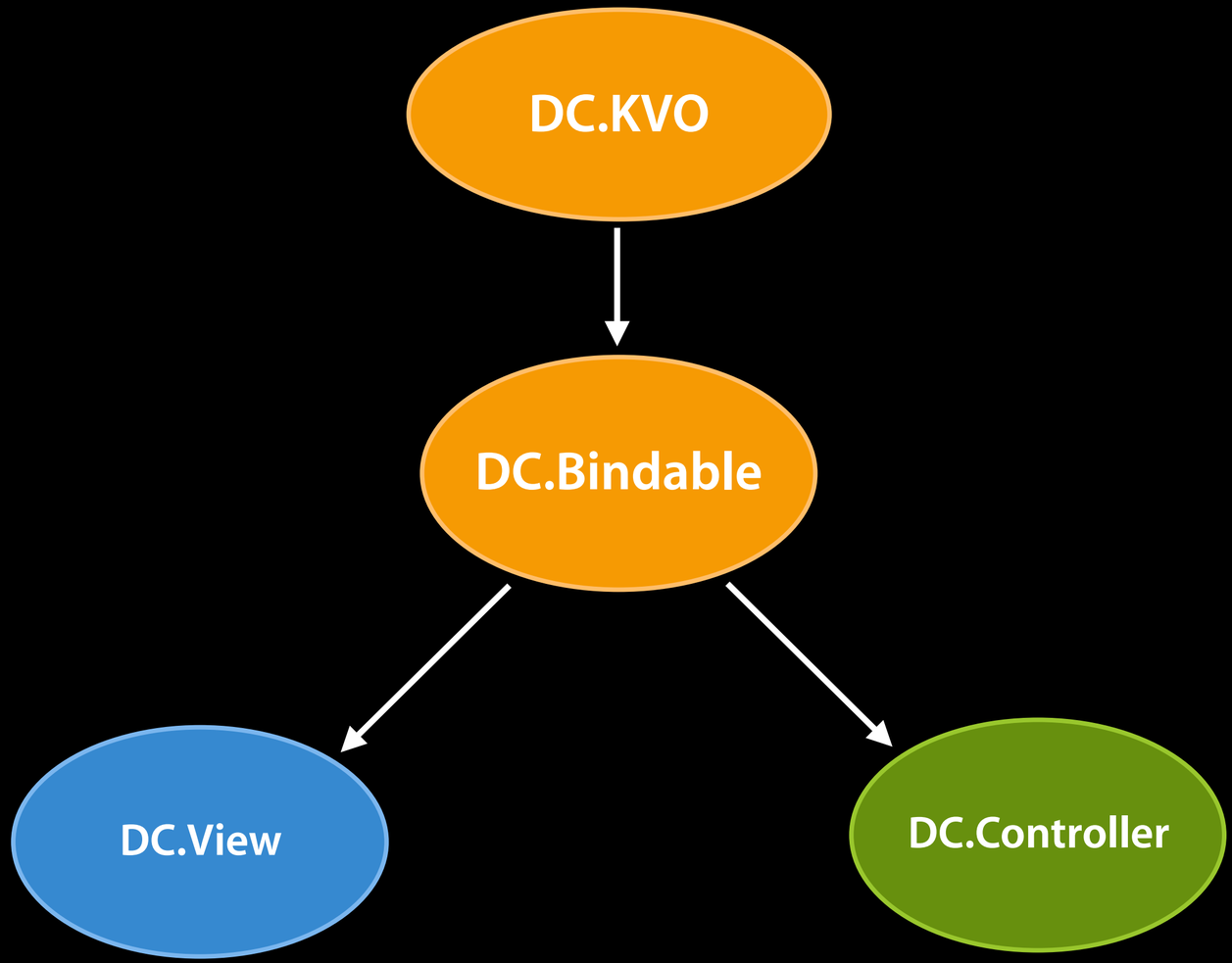
- Safari and iPhone web applications
- Resource sharing
- Data sources
- Bindings



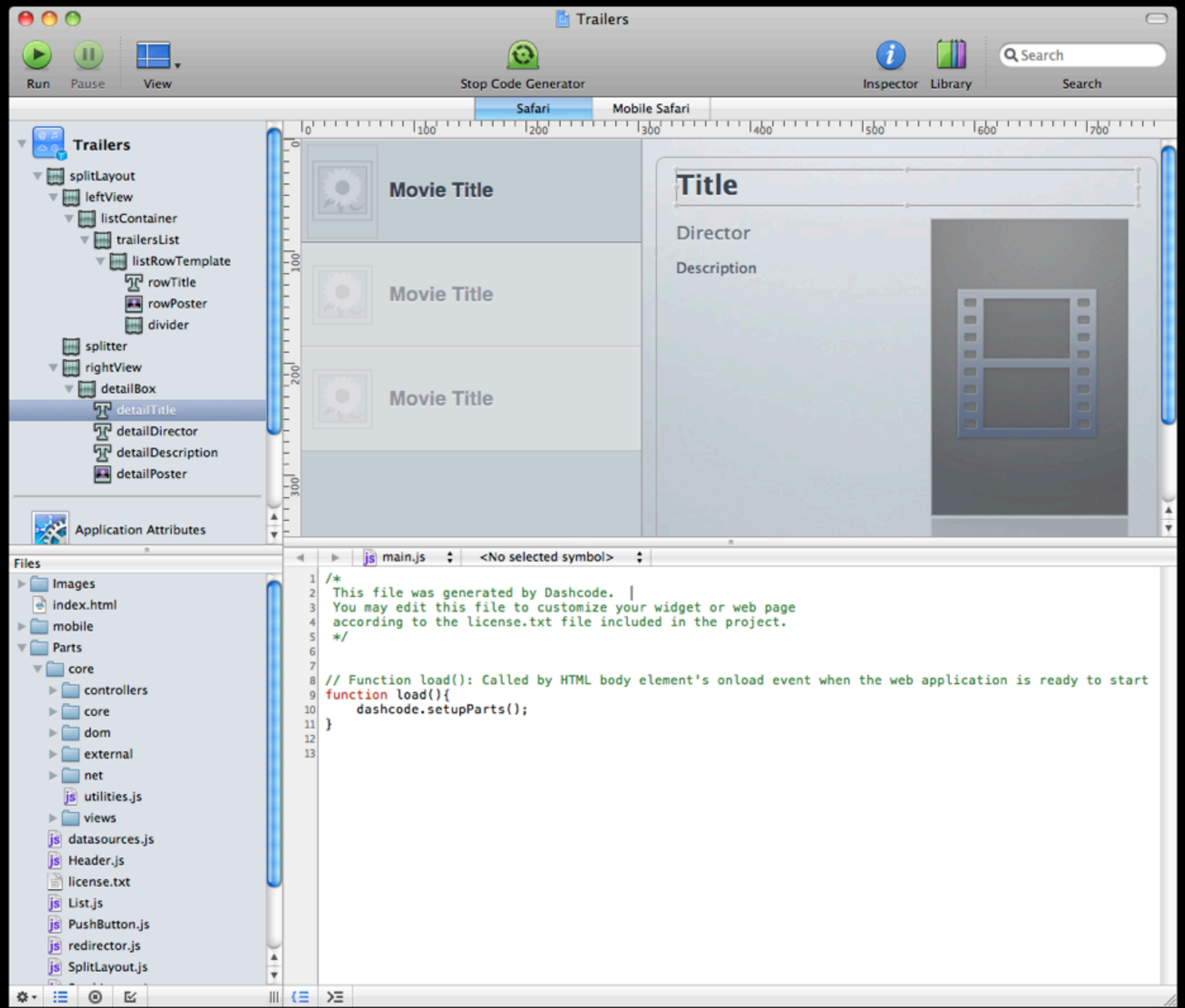
Behind the Scenes

Chris Ryan
Dashcode Engineer

JavaScript Framework



JavaScript Framework



Core Functionality

- Key Value Observing
- Bindings
- Central event handling
- Touch support

JavaScript Class Basics

```
Rectangle = Class.create(DC.KVO, {
    constructor: function(height, width){
        this.height = height;
        this.width = width;
    },
    area: function(){
        return this.height * this.width;
    }
});

var square = new Rectangle(10,10);

console.log(“Shape has an area of “ + square.area());
```

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});

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```

Subclasses

```
Rectangle = Class.create(DC.KVO, {...});

Square = Class.create(Rectangle, {
    constructor: function(side) {
        this.base(side,side);
    }
});
```

Subclasses

```
Rectangle = Class.create(DC.KVO, {...});

Square = Class.create(Rectangle, {
    constructor: function(side) {
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    }
});
```

Data Sources

Data Sources

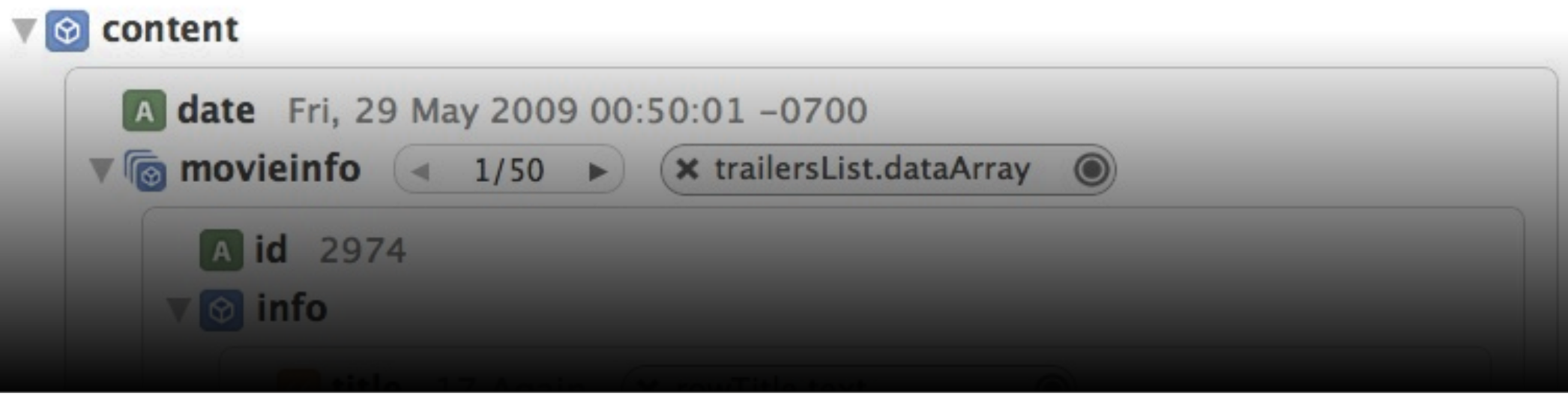
- Instance of DC.AjaxController
- Fetches on load
- Access your data as objects
- Dynamic updates

Changing Data Source Parameters

```
var dataSource = dashcode.getDataSource(‘trailers’);

dataSource.setValueForKeyPath(‘G’,‘parameters.rating’);
```

URL http://www.apple.com/trailers? set=new rating=G



Changing Data Source Parameters

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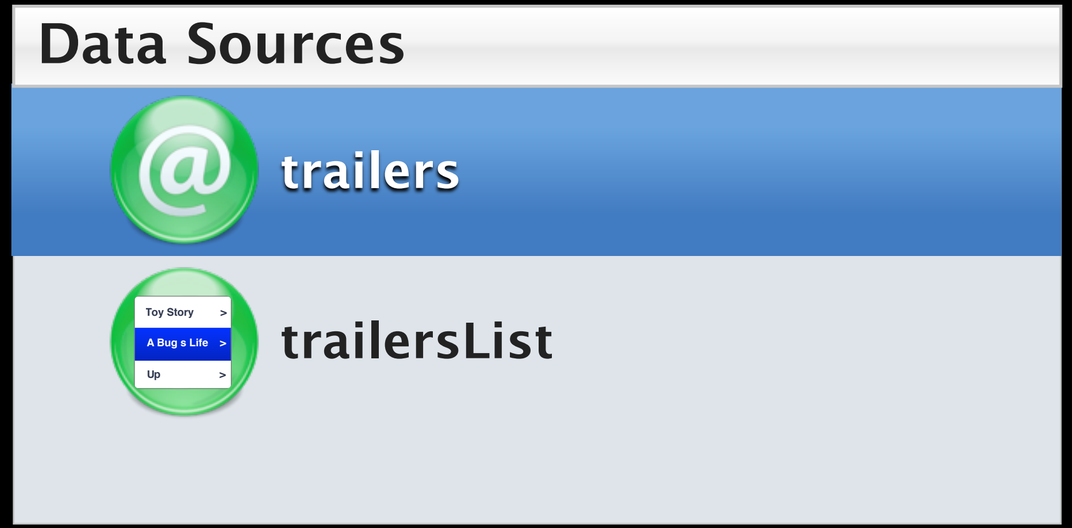
dataSource.setValueForKeyPath(‘G’,‘parameters.rating’);
```

Changing Data Source Parameters

```
var dataSource = dashcode.getDataSource('trailers');

dataSource.setValueForKeyPath('G','parameters.rating');
```



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dataSource.setValueForKeyPath(‘G’,‘parameters.rating’);
```

Getting Data and State

Data

```
dataSource.valueForKeyPath(‘content.info.actors’);
```

State

```
dataSource.addObserverForKeyPath({}, function(change){

    console.log(‘Error fetching trailers. ‘ + change.newValue);

}, ‘errorMessage’);
```

Getting Data and State

Data

```
dataSource.valueForKeyPath(‘content.info.actors’);
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Getting Data and State

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State

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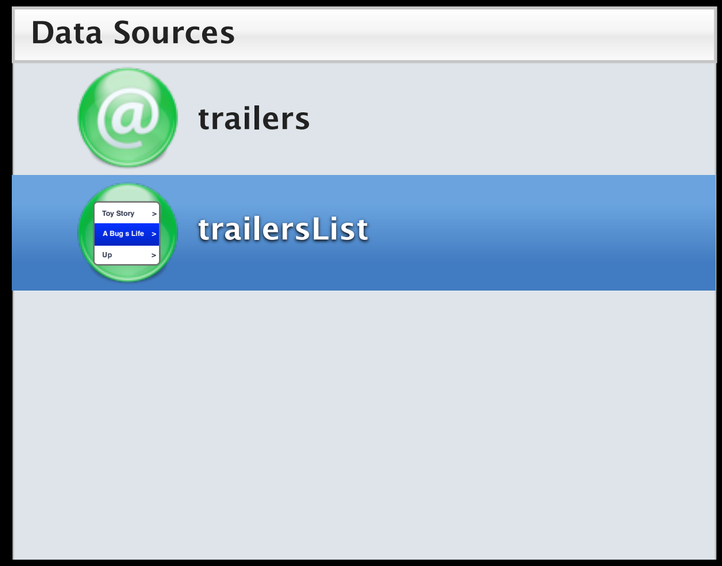
```

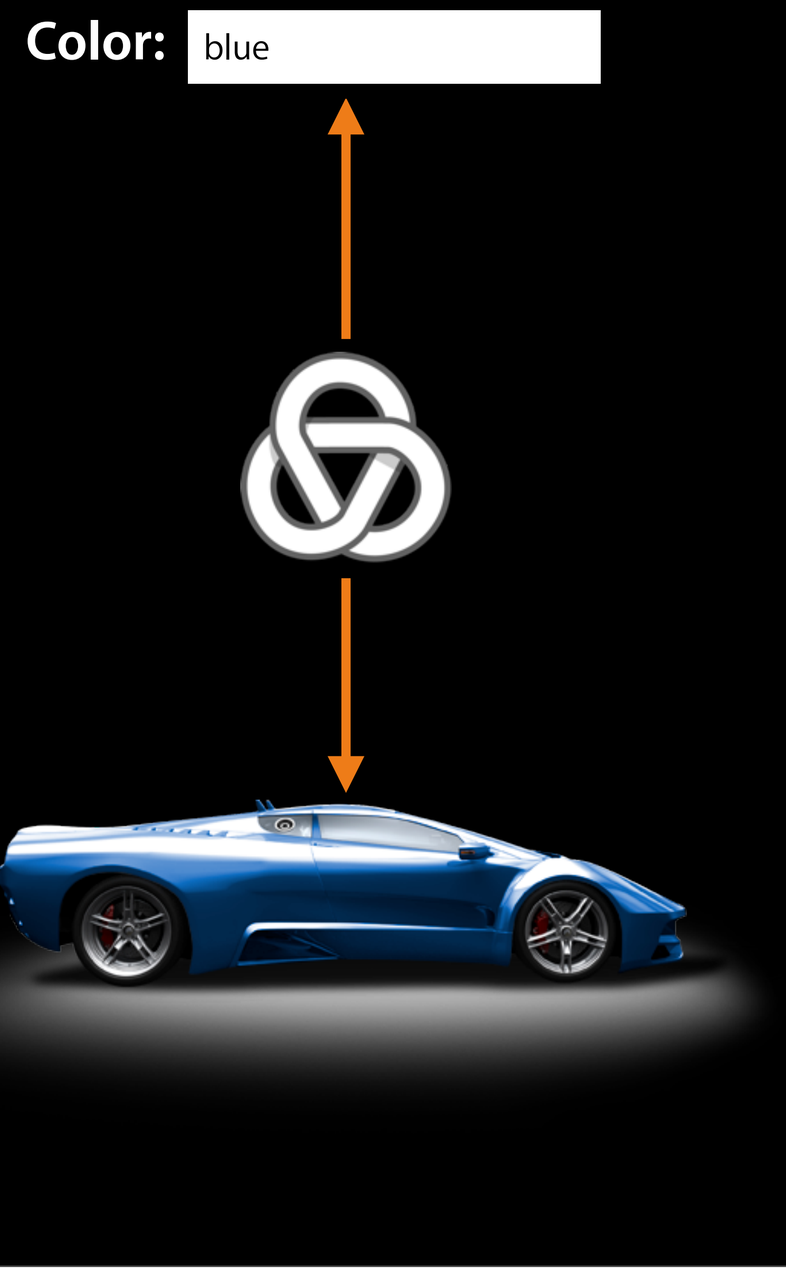
Collection Data Sources

- Instance of DC.ArrayController
  - Sorting
  - Filtering
  - Selection management
- Accessed via dashcode.getDataSource

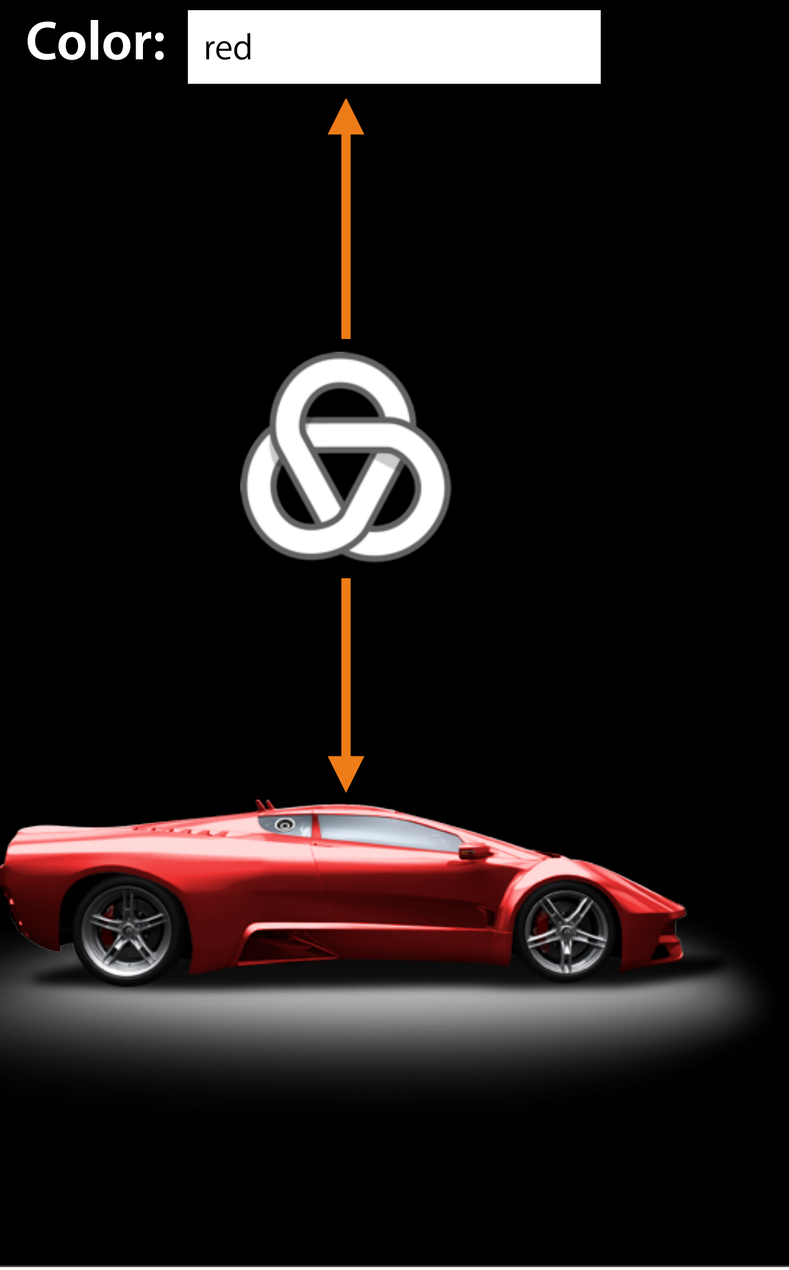


Bindings

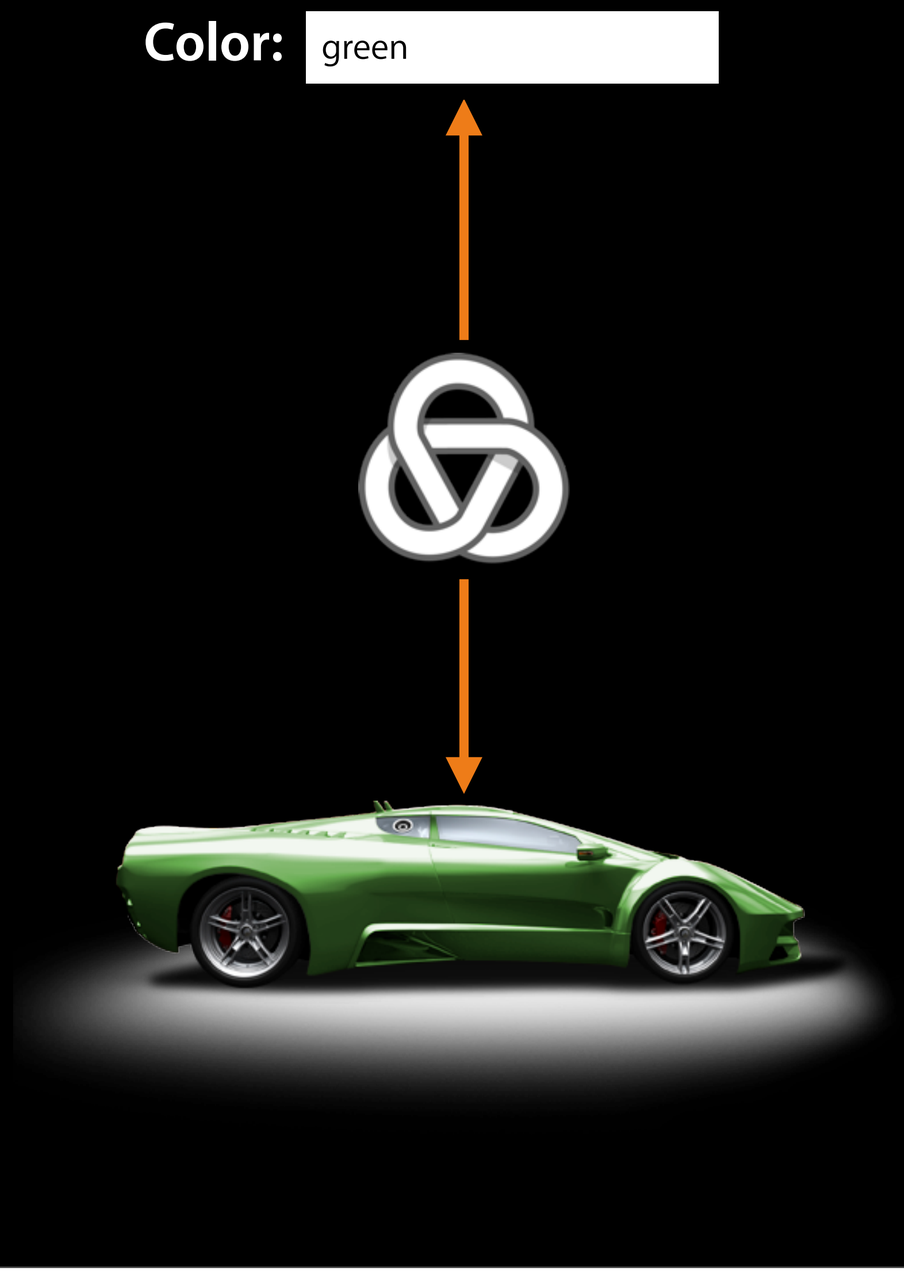
Bindings



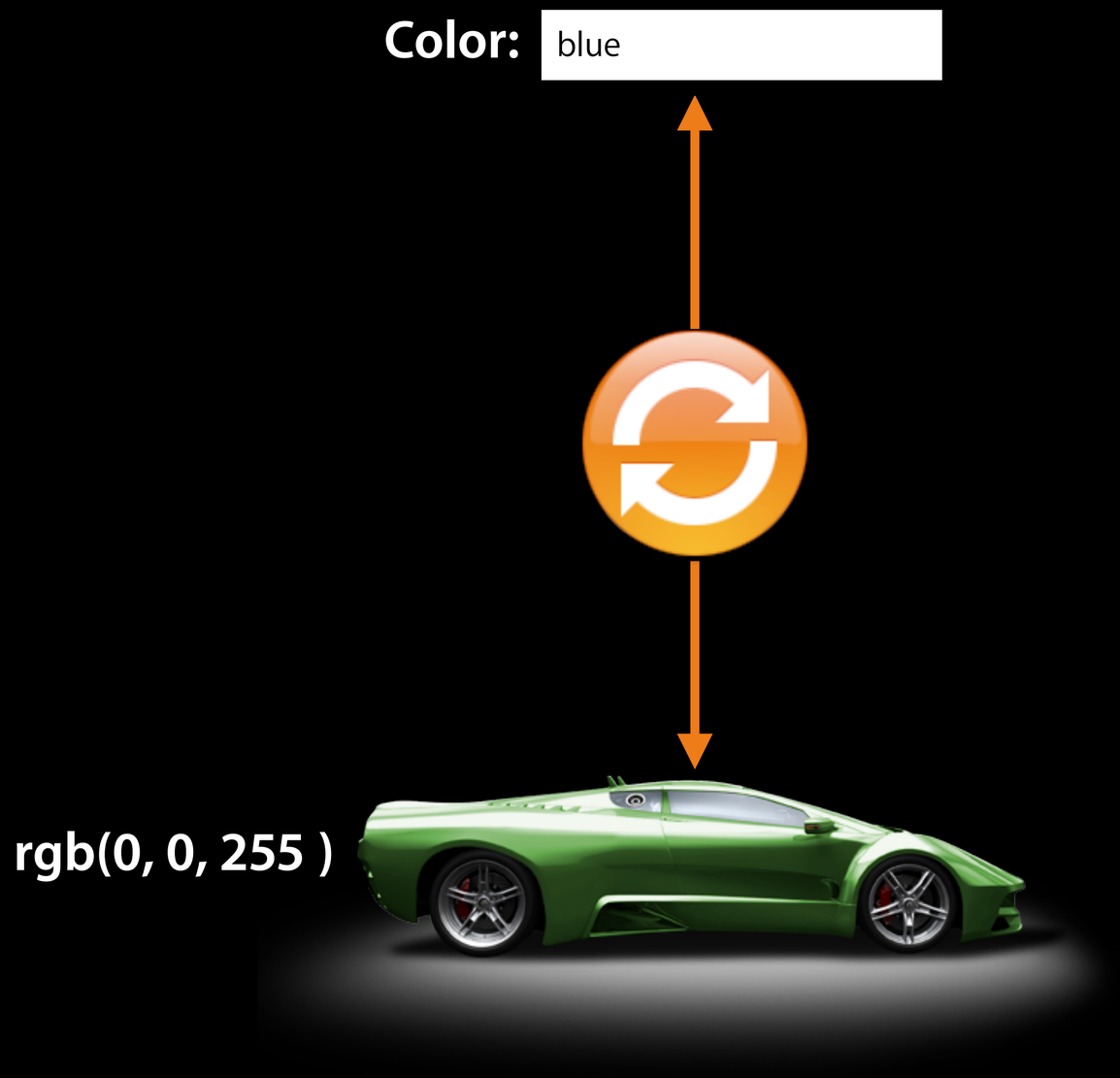
Bindings



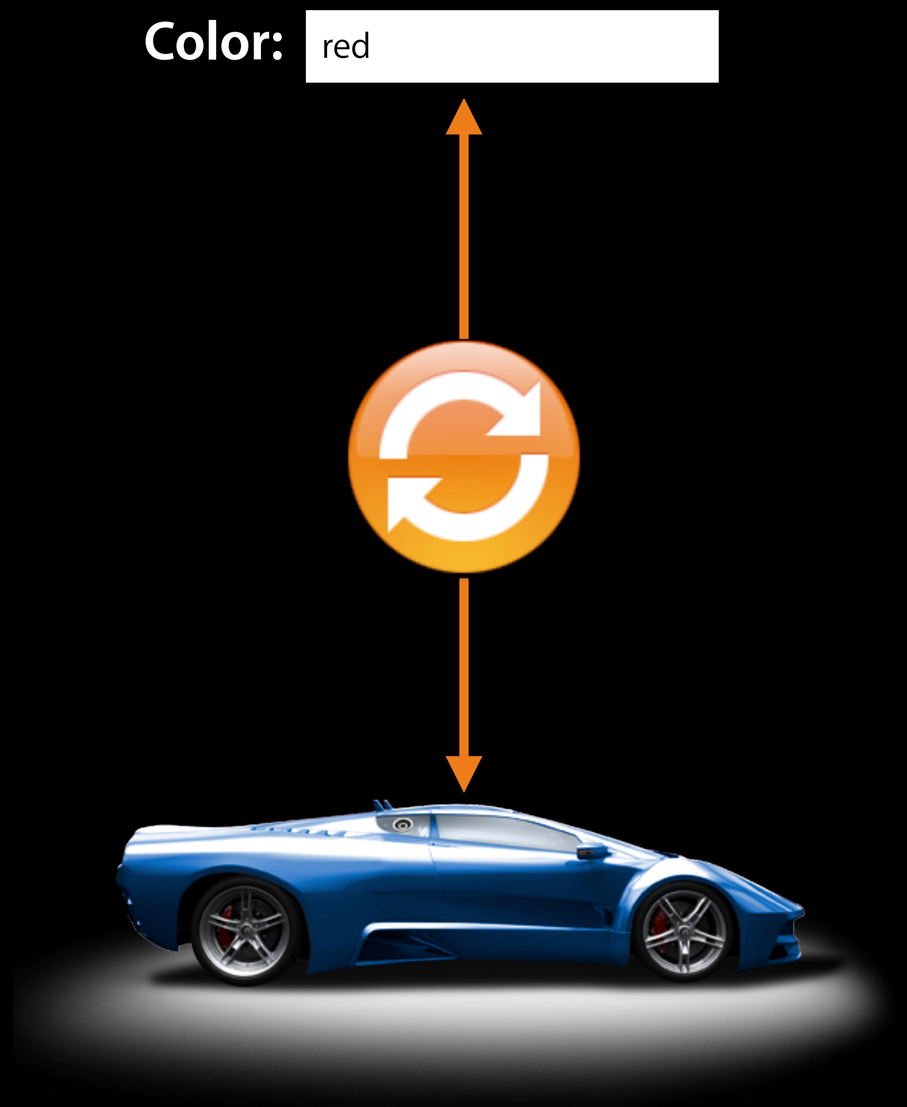
Bindings



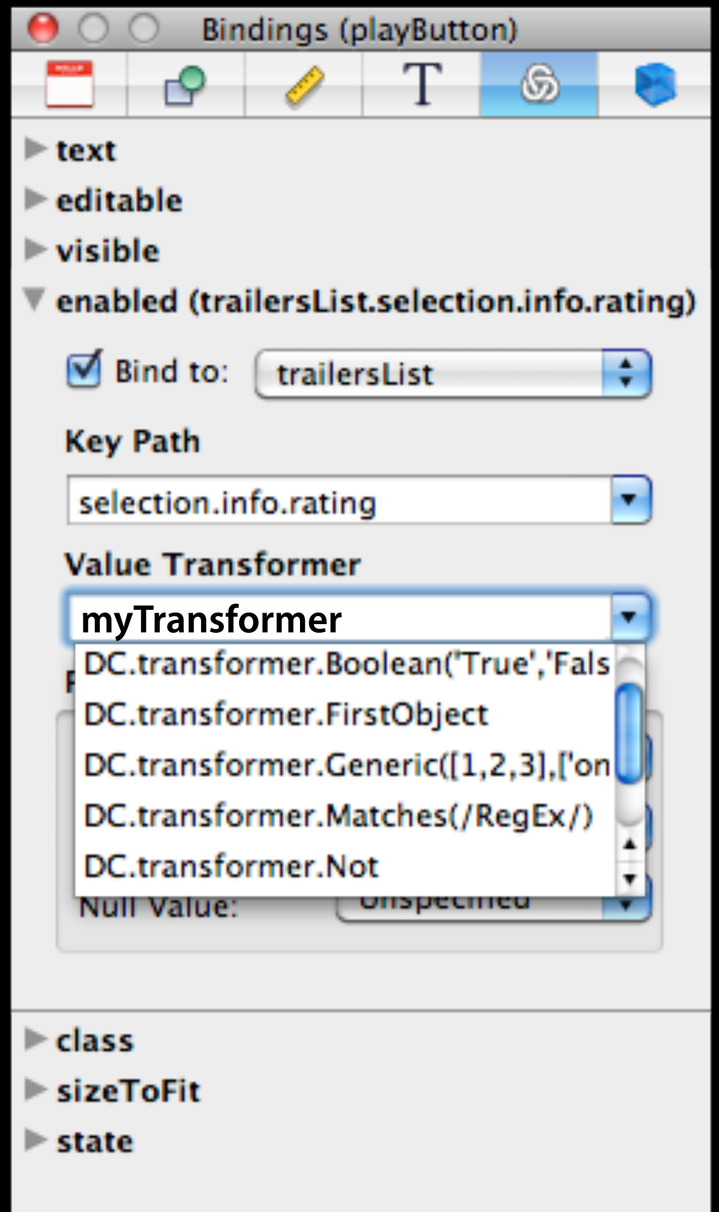
Value Transformers



Value Transformers

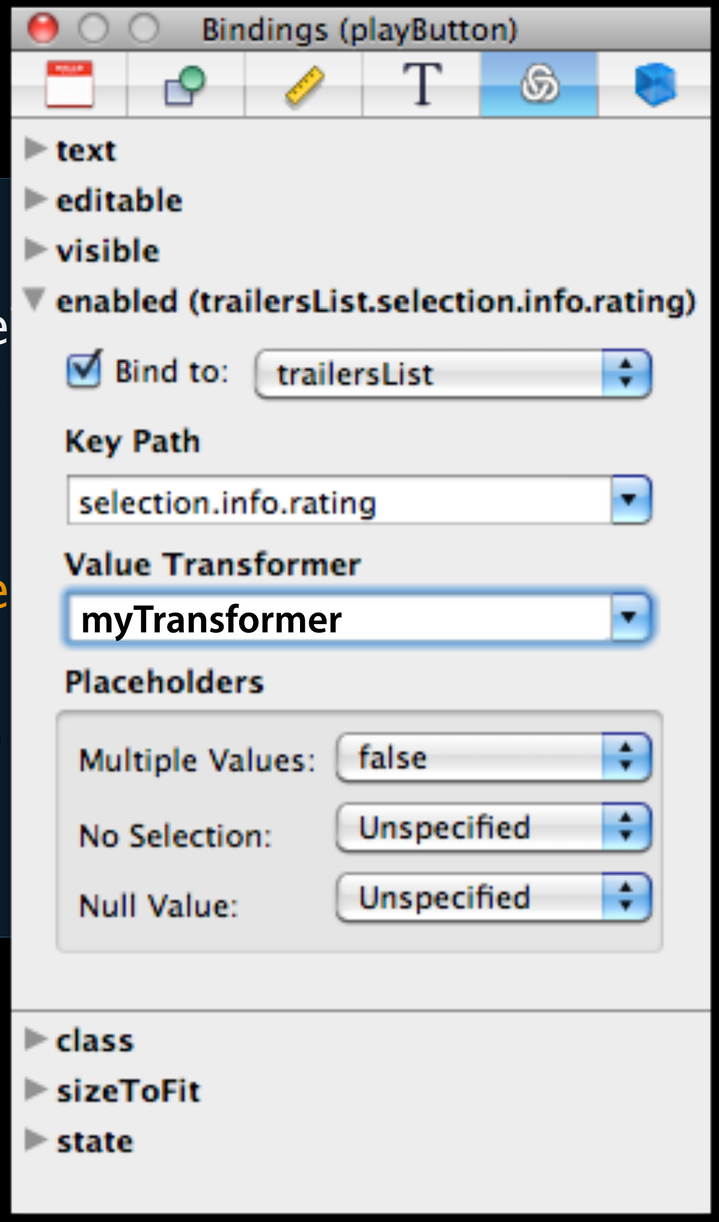


Setting Value Transformers

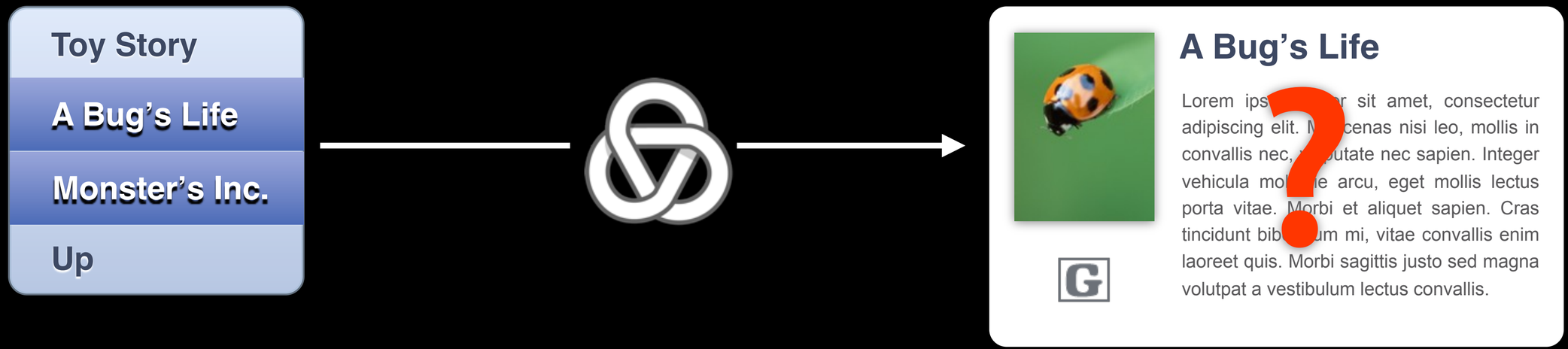


Setting Value Transformers

```
myTransformer =
Class.create(DC.Value
    transformedValue:
   return value;
    },
    reverseTransforme
function(value){
        return value;
    }
});
```



Customizing Selection Binding



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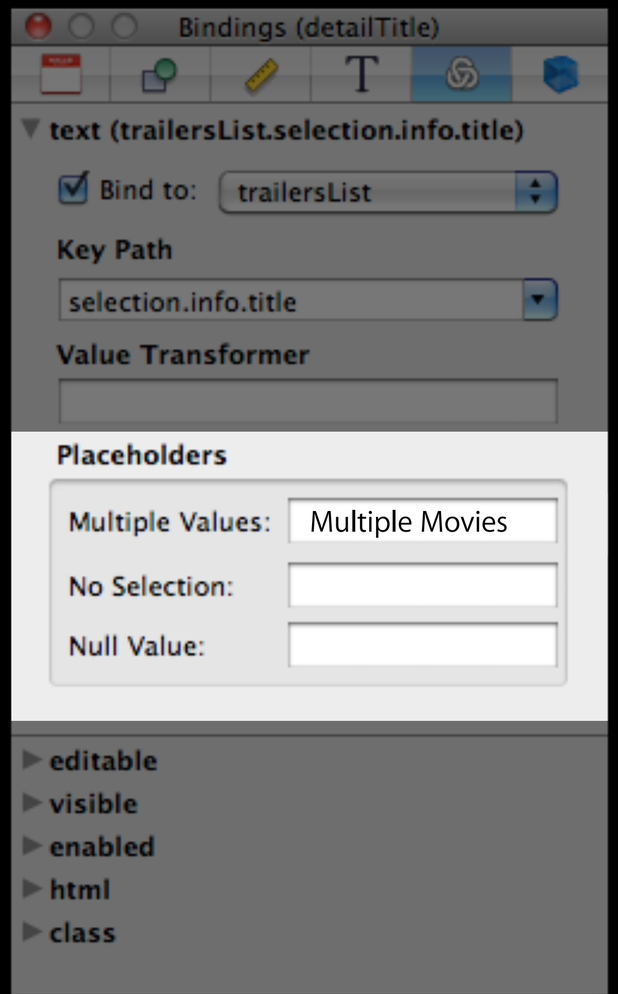
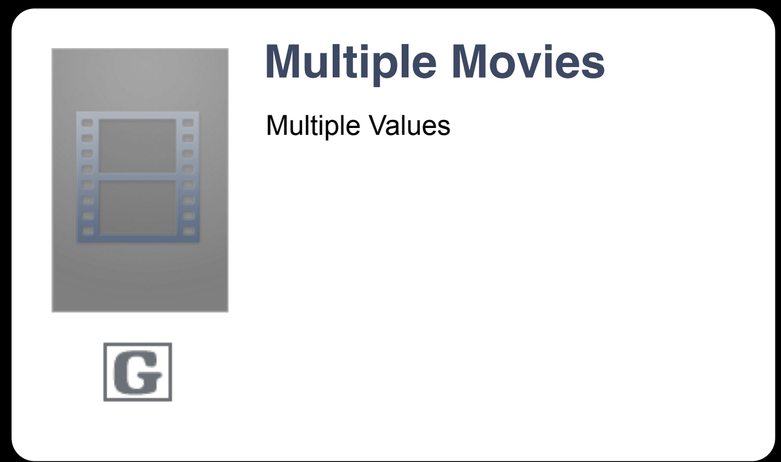
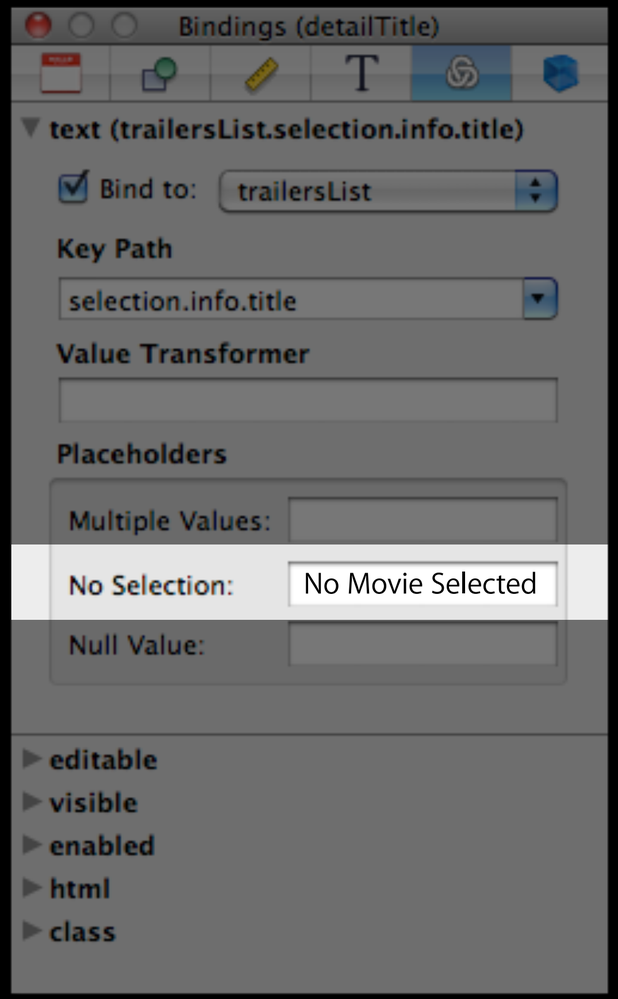
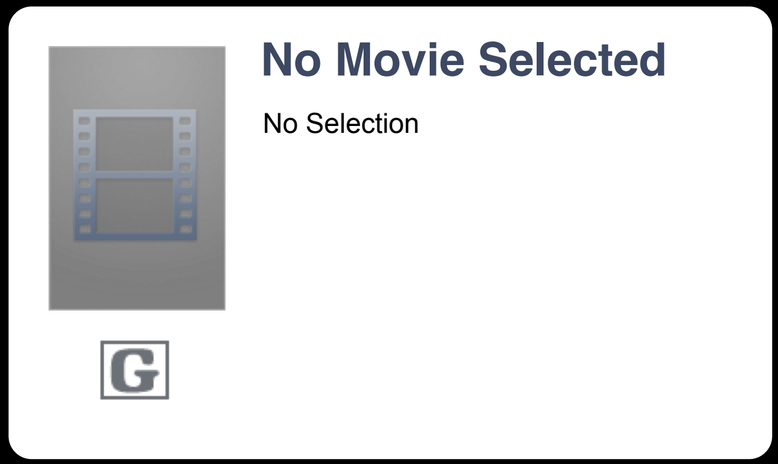




Customizing Selection Binding

- Toy Story
- A Bug's Life
- Monsters, Inc.
- Up





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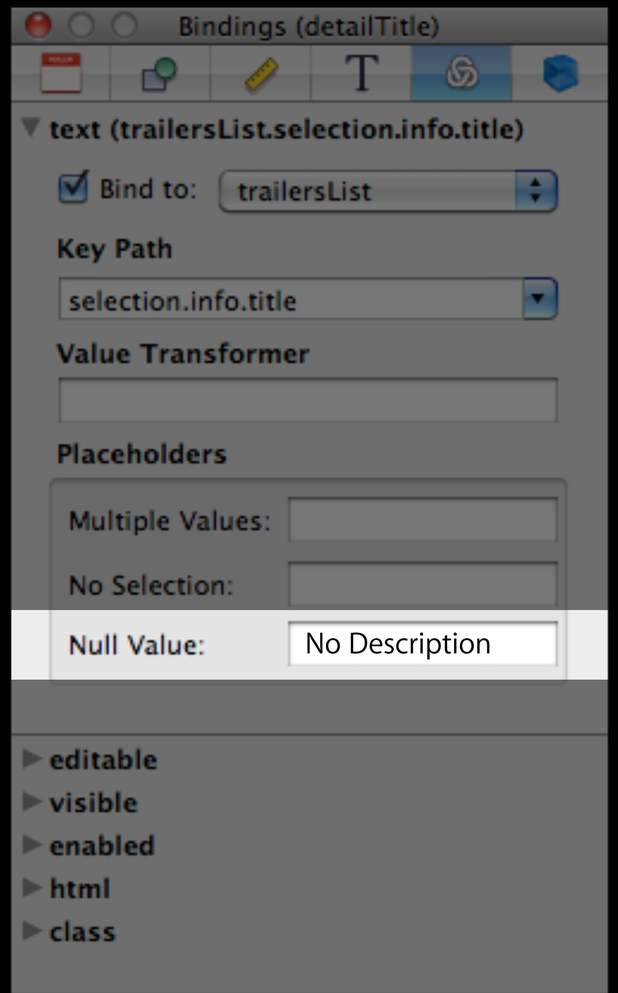
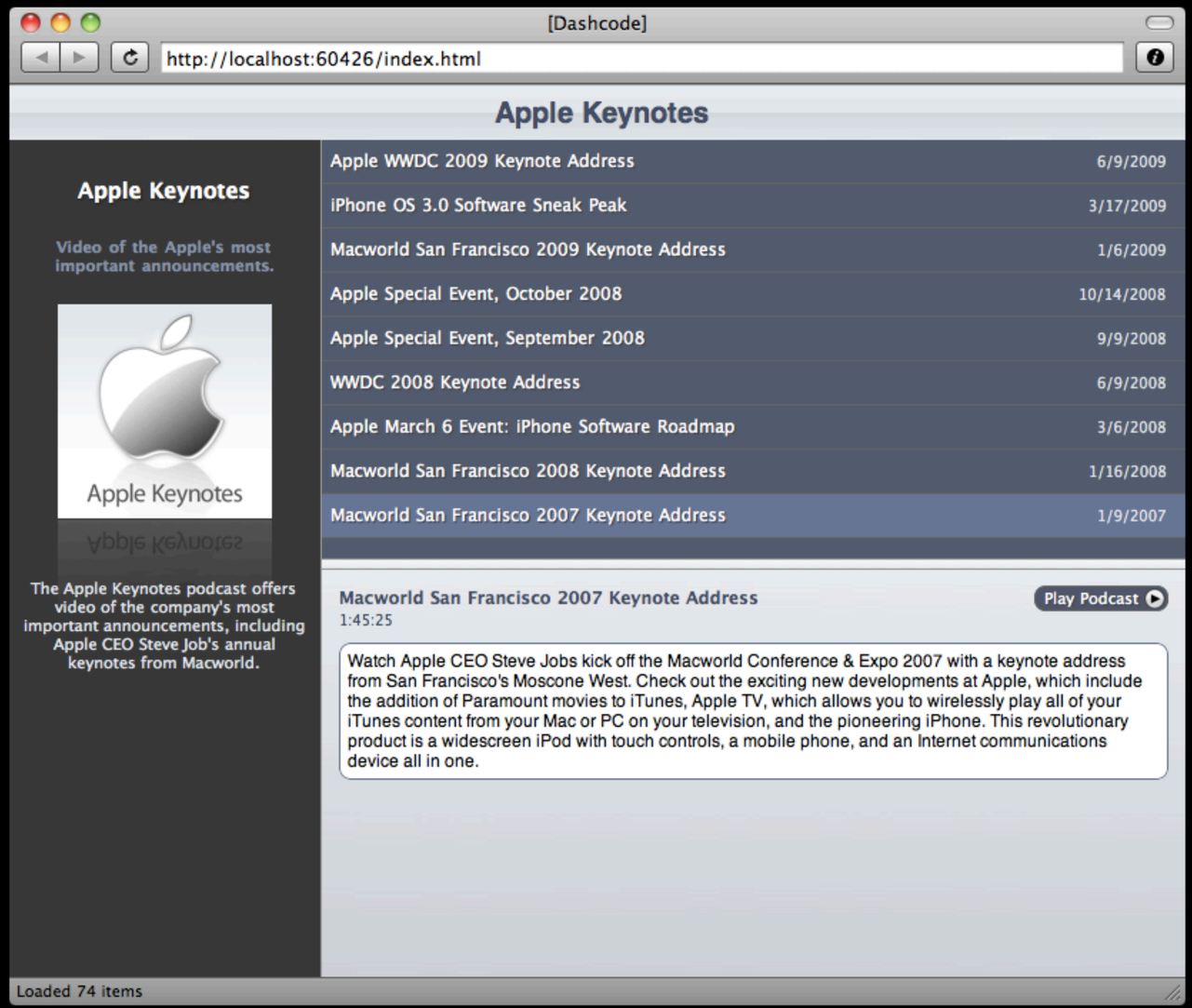


Demo

Summary

Podcast
Run
Pause
View
Inspector
Library
Search
Safari
Mobile Safari
Podcast
header
content
overlayContainer
Application Attributes
Favicon
Run & Share
Publication Date
Play Podcast
Web Standards
Toy Story
A Bug's Life
Monsters, Inc.
Up
lady bug zoom
Files
Images
index.html
mobile
Parts
safari
Scripts
// Function: load(
// Called by HTML
function load()
{

Great End Result!



More Information

Michael Jurewitz
Developer Tools Evangelist
jurewitz@apple.com

Vicki Murley
Safari Technologies Evangelist
vicki@apple.com

Documentation
Dashcode User Guide
Dashcode Help Menu

Related Sessions

Local Data Storage and Offline Web Applications for Safari	Russian Hill Thursday 3:30PM
Building Compatible Websites Using Emerging Web Technologies	Russian Hill Thursday 5:00PM

Labs

Dashcode Lab	OS X Lab A Thursday 3:30PM
Dashboard Widget Lab	OS X Lab A Friday 12:00PM

Next

Q&A

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developer.apple.com/wwdc/attendee

WWDC09